

SUMMARY OF C3P MAIN FEATURES IN 2004

Upon acceptance of the Centro Para Prevenção da Poluição (Center for Pollution Prevention), or C3P, Program Business Plan in December, 2002, a first, practical C3P-NASA working meeting was held in Lisbon on 26, 27 February, 2003.

Guidelines for future actions were then established and a series of events took place afterwards. The most prominent achievements in 2004 were the following:

- Development of the Technical Projects between NASA and TAP/OGMA, namely the project “Identification of Suitable Alternatives to Hexavalent Chrome in conversion coatings Alodine 1200/1000 on AL 2024, 6061 and 7075”.
 - A low-VOC and non-chromate coatings system was applied to the service door of a commercial (TAP Air Portugal) Air Bus A319 aircraft in Portugal in October 2004. The coatings are being monitored periodically throughout the aircraft's service.
 - In addition, a non-chromate conversion coating was dip-applied to several panels for subsequent salt spray (corrosion resistance) testing.
 - The Portuguese Air Force is now very interested in the coatings being tested; Major General Manuel Chambel, Director of Aeronautical Maintenance and Logistics, Portuguese Air Force, visited NASA Headquarters on 19 November to discuss these and other P2 technical exchange opportunities with NASA.
- Development of ideas for potential projects in 2005.
- Potential approval of the VOC's Project proposal by the European Commission, as well as potential approval of the New Polymer Concretes Project.
- Submission of the National Lead Free Solder Project to the IDEIA Program, by the end of March 2004. The same procedures apply to the National Lead Free Copper Zinc Alloys Project in preparation.
- Meetings with the UK BAE Systems and TWI, the Welding Institute UK, looking at the progress of implementation of a European Lead Free Solder Project.
- C3P presence at the Farnborough Air Show, in July 2004, for dissemination of C3P information and contacts with major International companies.
- Participation of C3P and ISQ as members in the Environmental Quality Committees/Working Groups of the Aerospace Defense Association of European Industries (ASD).

- C3P conducted a series of meetings with representatives of the Portuguese Association of Printers, Publishers and Periodicals (AIND); with the European Federation of Magazine Publishers (FAEP); and the European Association of Newspapers (ENPA), to discuss a possible intervention in the VOCs area.
- Meetings with the Portuguese Air Force that accepted painting half of an aircraft with an alternative to Chrome Conversion coatings, to start in January 2005.
- Meetings with the Spanish Innovation Development Foundation, INASMET, with the lead of ISQ.
- Visits to several Aerospace and Defense Companies in Poland.
- Meetings with Swedish companies (e.g. GECI) already partnered with BAE Systems, UK.
- Three institutions have agreed to sign the Exchanged Protocol: the Welding Institute UK (TWI), the Spanish Innovation and Technical Development Foundation (INASMET) and the Portuguese Air Force.
- **Coordination with the Portuguese Government.** Regular contacts have been maintained with The Ministry of Environment, through the Minister's Cabinet.

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C3P President

General Pelágio Castelo Branco